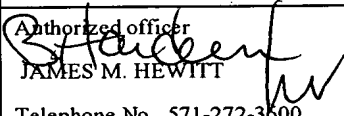


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 325.0251PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US05/09808	International filing date (day/month/year) 23 March 2005 (23.03.2005)	Priority date (day/month/year) 26 March 2004 (26.03.2004)
International Patent Classification (IPC) or national classification and IPC IPC: F16L 9/14 (2006.01), 9/16 (2006.01), 59/16 (2006.01) USPC: 285/47,123.3,123.15;138/113,114,149		
Applicant FLUOR TECHNOLOGIES CORPORATION		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u> </u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u> </u> sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 26 January 2006 (26.01.2006)	Date of completion of this report 25 August 2008 (25.08.2008)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/ US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer  JAMES M. HEWITT Telephone No. 571-272-3600	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US05/09808

I. Basis of the report1. With regard to the **elements** of the international application:*

- ☒ the international application as originally filed.
- ☒ the description:
 pages 1-10 as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☒ the claims:
 pages 11-13 as originally filed
 pages NONE, as amended (together with any statement) under Article 19
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☒ the drawings:
 pages 15-17 as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages NONE as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets Fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US05/09808**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)

Claims 8, 15-20 YESClaims 1-7, 9-14 NO

Inventive Step (IS)

Claims NONE YESClaims 1-20 NO

Industrial Applicability (IA)

Claims 1-20 YESClaims NONE NO**2. CITATIONS AND EXPLANATIONS**

Please See Continuation Sheet

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

V. 2. Citations and Explanations:

Claims 1-7 and 9-14 lack novelty under PCT Article 33(2) as being anticipated by McKay et al (US 3,865,145).

With respect to claim 1, McKay et al disclose a cryogenic pipeline comprising: a bulkhead having an inner transition element (58), and a first and second outer transition element (60) coupled to and at least partially surrounding the inner transition element; wherein the inner transition element forms a conduit that transfers cryogenic product from a first cryogenic pipeline (12) to a second cryogenic pipeline (12); and wherein the first and second outer transition elements couple a first and second jacket pipeline (14) to the first and second cryogenic pipelines, respectively, such that thermal stress load in the first and second cryogenic pipelines is transferred to the first and second jacket pipelines, respectively.

With respect to claim 2, McKay et al disclose the pipeline of claim 1 wherein the inner transition element has a pipe configuration with an inner diameter that is substantially identical to an inner diameter of the first and second cryogenic pipelines.

With respect to claim 3, McKay et al disclose the pipeline of claim 1 wherein at least one of the outer transition elements has an outer diameter that is substantially identical to an outer diameter of the first and second jacket pipelines.

With respect to claim 4, McKay et al disclose the pipeline of claim 1 further comprising a sleeve (66) disposed in a space between the first and second outer transition elements.

With respect to claim 5, McKay et al disclose the pipeline of claim 1 wherein at least one of the inner transition element and the first and second cryogenic pipelines are at least partially enclosed by an insulating material (50).

With respect to claim 6, McKay et al disclose the pipeline of claim 1 further comprising an external insulation (50) that covers the first and second outer transition element.

With respect to claim 7, McKay et al disclose the pipeline of claim 1 wherein the inner transition elements and the outer transition elements are contiguous.

With respect to claim 9, McKay et al discloses a field joint for a cryogenic pipe-in-pipe pipeline, in which an inner portion (58) of the field joint fluidly couples a first and a second section of a product conduit (12) of the pipeline, in which an outer portion (60) couples a first and a second section of a jacket (14) of the pipeline, and in which inner and outer portions are coupled together such that a thermal

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

stress load from the first and a second sections of the product conduit is transferred to the first and second sections of the jacket in the pipeline, respectively.

With respect to claim 10, McKay et al disclose the field joint of claim 9 wherein the outer portion is separated into two ring-shaped elements that are coupled to the inner portion via an angled connector (see Fig. 7).

With respect to claim 11, McKay et al disclose the field joint of claim 10 wherein a sleeve (66) is disposed in a space between the two ring-shaped elements.

With respect to claim 12, McKay et al disclose the field joint of claim 9 further comprising insulating material (50) coupled to at least one of the product conduit and the inner portion.

With respect to claim 13, McKay et al disclose the field joint of claim 9 further comprising insulating material (50) that covers the outer portion to form an external insulation.

With respect to claim 14, McKay et al disclose the field joint of claim 9 wherein the inner and outer portions are contiguous.

Claims 8 and 15-20 lack an inventive step under PCT Article 33(3) as being obvious over McKay et al (US 3,865,145).

As McKay et al teach all of the limitations set forth in the article claims, and the method claims do not set forth any particularly unique steps and do not deviate from the use of the device within the capacity of one having ordinary skill in the art, McKay et al are also considered to teach all of the limitations set forth in these method claims.

With respect to claims 8 and 20, it would have been an obvious matter of design choice to apply a weight coating to at least one of the first and second jacket pipelines as is known to provide negative buoyancy and mechanical protection in river crossing, offshore pipelines or muskeg applications.

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----